



QUEST INTERNATIONAL UNIVERSITY PERAK
FACULTY OF INTEGRATIVE SCIENCES AND TECHNOLOGY
School of Computing

Bachelor in Information Technology (Hons)

BIT 3107 IT PROJECT PHASE 1
AND
BIT 3108 IT PROJECT PHASE 2
HANDBOOK

Version 1.0
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1.0 Introduction

Every student undertaking Bachelor of Information Technology (Hons) is required to complete an IT project under the supervision of an academic staff member or an external supervisor from the industry. The project should provide students with the opportunity to bring together the academic knowledge and skills acquired from the range of modules taken throughout the study period.

In general the whole project are divided into two phases under two separate subjects which are:

- 1) BIT 3107 IT Project Phase 1, with 2 credit hours
- 2) BIT 3108 IT Project Phase 2, with 4 credit hours

BIT 3107 IT Project Phase 1 should be completed by the students in the first or second semesters in Year 3. With only BIT 3107 IT Project Phase 1 completed and passed, student will be able to continue to the BIT 3108 IT Project Phase 2.

2.0 Objectives of IT Project

The objectives of IT Project are:

- i. To introduce the development of a real time application to the students.
- ii. To implement the concepts and techniques learned.
- iii. To increase student's capabilities in managing a project
- iv. To use the system analysis and design before the implementation of a system.
- v. To make sure that students choose the appropriate programming tool to develop a system.

3.0 Standard Procedure

Students are expected to follow the following Standard of Procedure (Fig. 1) for Phase 1:

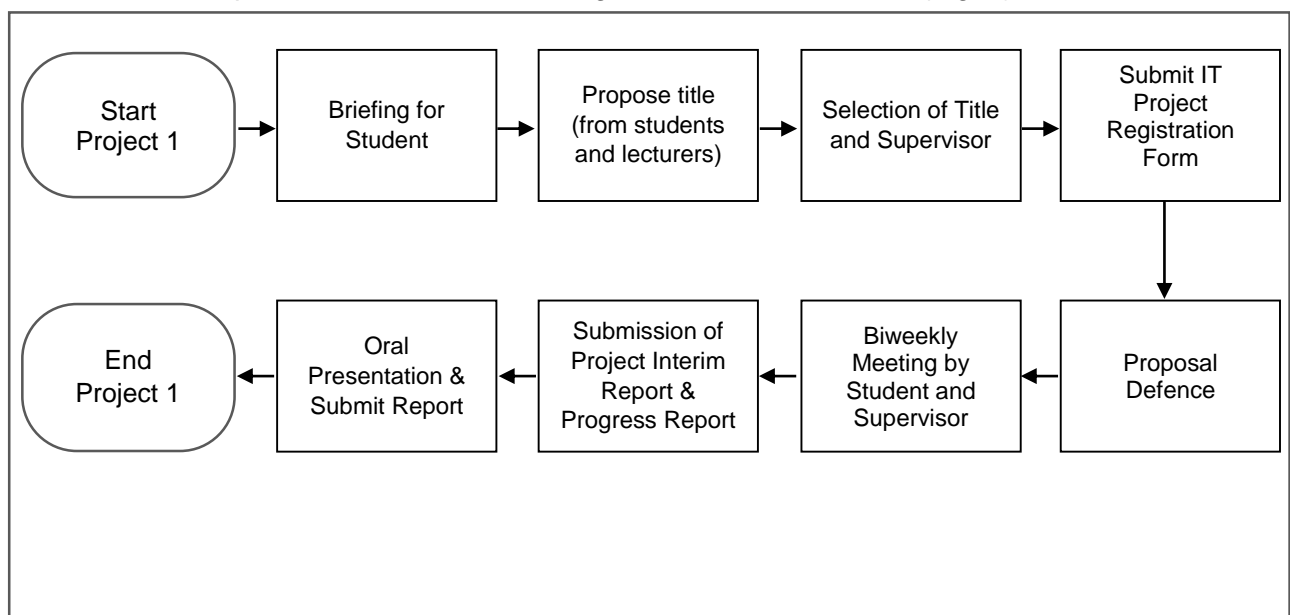


Fig. 1 Standard of Procedure IT Project Phase 1

For IT Project Phase 2), students should adhere to the Standard of Procedure (Fig. 2) for IT Project(Phase 2.

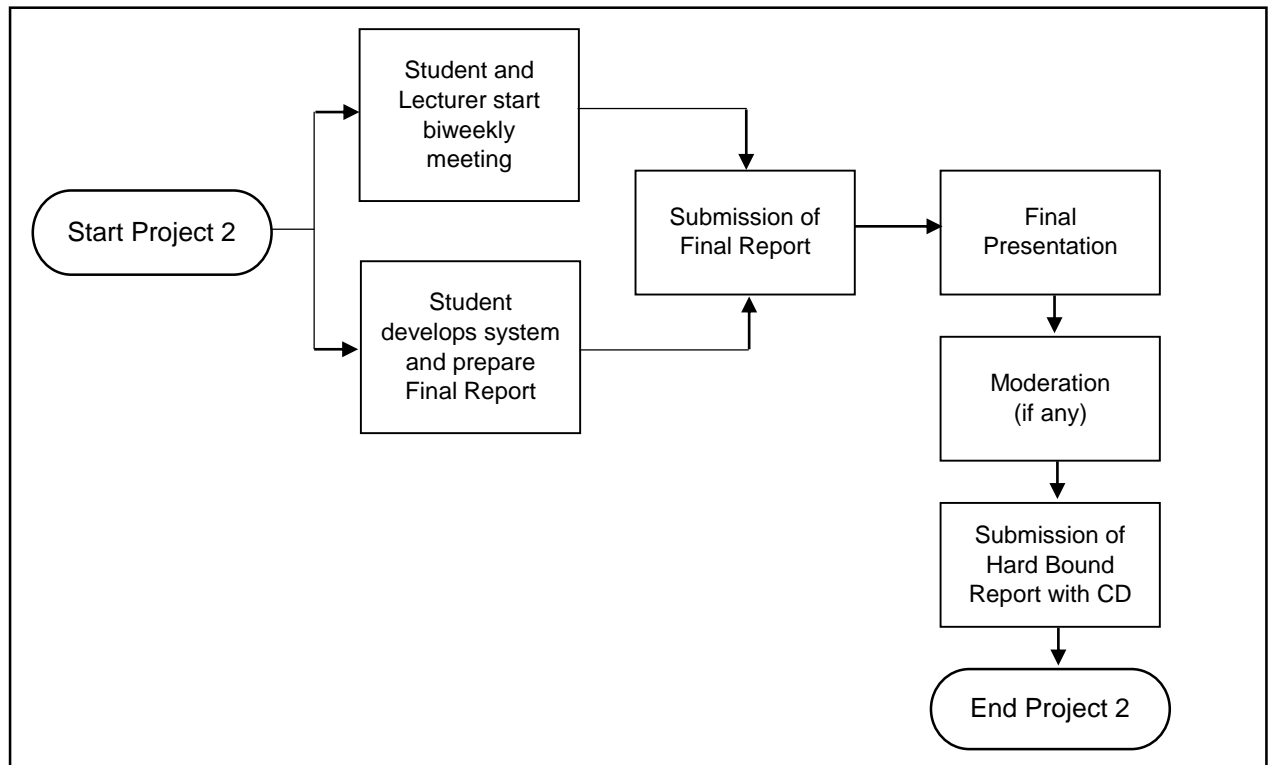


Fig. 2 Standard of Procedure IT Project Phase 2

4.0 Registration

Students are advised to register their Project Title as soon as possible, after meeting their potential Supervisor. The due date of Title will be announced in the first week of each semester.

In order to register an agreed Project Title, students need to fill in the Title Registration Form (**Appendix 1: BIT-ITP-001-Title Registration Form.docx**). This form should be signed by the Supervisor and should be sent to the IT Project Coordinator for approval.

This form is also formality of assigning student to a dedicated academic Supervisor for consultation and guidance throughout the Project phases. Once registered, the Supervisor will be supervising student for the entire Project. Unless, a Change of Supervisor Application Form is submitted to the IT Project Coordinator using a specific form, which discuss in further detail.

5.0 Timeline and Milestone

For every semester, a specific Timeline and Milestone will be announced, usually in the first week of each semester. Specific date will indicated together with the role/responsibilities, as in Table 1.

Table 1: Basic Timeline and Milestone for IT Project Phase 1 and Phase 2

Milestone	Date	Action Required (AR) by Supervisor / Student / Moderator
Registration	Friday Week 1	Student AR: <ul style="list-style-type: none"> Identify area of interest and look for potential supervisors. Suggest a project title. Supervisor AR: <ul style="list-style-type: none"> Hold discussion sessions with students. Prepare project titles.
Submission of title registration form	Friday Week 1	Student AR: <ul style="list-style-type: none"> Submit title registration form. ITP Committee AR: <ul style="list-style-type: none"> Evaluate the titles. Students who do not have a project title will be assigned to a supervisor and a title.
Proposal defence	Friday Week 2	Student AR: <ul style="list-style-type: none"> Present proposal to IT Project committees. ITP Committee AR: <ul style="list-style-type: none"> Evaluate the proposal Give endorsement whether to proceed with the proposed title or make changes.
Biweekly meeting and Mid Term Assessment	Progress Report: week 4, 6, 8, 10, 12	Student AR: <ul style="list-style-type: none"> Meet with supervisor at least once per week / biweekly as determined by the supervisor. Submit a progress report. Supervisor AR: <ul style="list-style-type: none"> Verify and sign on the progress report. Supervisors to keep the verified reports.
Submission of project Interim Report or Final Report	Friday Week 13	Student AR: <ul style="list-style-type: none"> Submit 2 sets of Interim Report to supervisor. Supervisor AR: <ul style="list-style-type: none"> Mark interim report. Results are handed in to the ITP Committee. Moderator AR: <ul style="list-style-type: none"> Review report. Get some idea of student's project before student's presentation.
Oral Presentation or Final Presentation	Week 14	Student AR: <ul style="list-style-type: none"> Present project in public. Supervisor AR and Moderator AR: <ul style="list-style-type: none"> Assessment by moderator and expert panels.
Moderation (if necessary)	Week 15	Supervisor, Moderator and Expert Panel AR: <ul style="list-style-type: none"> Attend Deliberation Meeting

Submission of Hard Bound Report with CD	Week 16	Student AR: <ul style="list-style-type: none"> • Prepare Hard Bound Final Report • Burn CD (2 sets) to be submitted with the Report and Project Submission Form.
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This Timeline and Milestone is subject to change based on future arrangement or changes in academic session.

6.0 Possible Changes within the IT Project

When undertaking IT Project, sometimes students or supervisors might face problems which could not be solved after several trials. In this case, the final decision should be made as to avoid delay thus affecting the progress of the project. To avoid this issue, students are allowed to do some changes to their IT for the following cases:

- i. Change of Supervisor – Refer to Project Guidelines (Item No. 6.1).
- ii. Change of Project Title – Refer to Project Guidelines (Item No. 6.2).
- iii. Extension of Project (Phase 2) – Refer to Project Guidelines (Item No. 6.3).

All of these changes is a serious matter and any changes proposed should come with strong justifications.

Students need to fill in specific form, justify the changes, get approval from respective roles and submit to the IT Project Coordinator. Please be informed that, this is only a procedure of application, where each case will be treated solely and the end result could be either Approved or Not Approved.

6.1 Change of Supervisor

Under exceptional cases, a student is allowed to apply for changing project supervisor, subject to the approval of the IT Project (ITP) Committee. The application shall be done in Phase 1. Changes applied in Phase 2 is not recommended at all.

Before submitting the application form to the ITP Committee, the applicant shall discuss the matter with the current Supervisor. The applicant shall also discuss the matter with the new Supervisor and the application must be agreed by both current and new Supervisor.

Applicant has to fill in the Application for Change of Supervisor Form (**Appendix 2: BIT-ITP-002-Application for Change of Supervisor.docx**). The IT Project Committee will consider the application in the case by case basis, and it has an absolute right to approve or reject the application.

6.2 Change of Project Title

Under certain circumstances, a student is also allowed to apply for project title changes. This action should be taken once the project direction does not parallel to the project title anymore. Although this is allowed, Supervisor should guide student to the right path. Same goes to the student, if any finding has shown different path getting apart from the title, student should suggest a title change to the Supervisor with strong justification using the Application for Change of Project Title (**Appendix 3: BIT-ITP-003-Application for Change of Project Title.docx**).

The approval is subject to the decision of ITP Committee. Student might be called at any time to defend the changes (if necessary).

6.3 Extension of Project (Phase 2)

In some other cases, where students need more time to complete the project due to valid reasons and justification, the Application for Extension of IT Project; (**Appendix 4: BIT-ITP-004-Application for Extension of Project.**) should be submitted to the ITP Committee with strong reason and justification.

7.0 Reports

Undergoing IT Project which consists of two consecutive semesters or Phase 1 and Phase 2, need of report submission.

Where in the first phase (Phase 1), student needs to submit the:

- i. Progress Report – Refer to Project Guidelines (Item No. 7.1)
- ii. Project Interim Report – Refer to Project Guidelines (Item No. 7.2)

While in Phase 2, student needs to submit the:

- i. Progress Report – Refer to Project Guidelines (Item No. 7.1)
- ii. Project Final Report – Refer to Project Guidelines (Item No. 7.3)

All of these reports should follow the standard Cover Page as per attached in **Appendix 5: 02 BIT-ITP-008-Report Cover Page.docx**. Only the title of document needs to be updated of either Project Interim Report or Project Final Report.

Please take note that Cover Page for Hard Bound IT Project is different from this.

7.1 Progress Report

A project Progress Report should address and report on the following:

- i. Works done between the last progress report and the current progress report.
- ii. Problems encounter since last progress report is submitted.
- iii. Works that will carry out between the current progress report and the next progress report.

The aim of this progress report is to monitor the students' IT Project progress. Students have to submit minimum 5 progress reports. The Progress Report Form can be obtained from **Appendix 6: BIT-ITP-005-Progress Report (p1).docx** for Phase 1 whereas **BIT-ITP-005-Progress Report (p2).docx** for Phase 2.

7.2 Proposal Defence

Students have to present their proposal in front of the appointed panels by ITP Committees to defence their title before getting the endorsement from the panels to proceed with the proposed title.

The presentation slides shall include the following:

- i. Project Title
- ii. Problem Statement
- iii. Project Objectives
- iv. Project Scopes
- v. Milestones
- vi. System Architecture
- vii. Conclusion

Panels shall advice for further improvement that can be applied during the development of the project. If the proposed title or content does not meet the minimum requirements based on the IT Project objectives, students are required to make the necessary changes as advised.

7.3 Project Interim Report (Phase 1)

The main aims of this Interim Report is to:

- 7.3.1 Ensure student is well prepared for the execution of Phase 2, each from the theoretical background , necessary tools, equipment and skills.
- 7.3.2 Familiarize with writing formal documentation of Final Report and Hard Bound Report.

At this stage of IT Project Phase 1, a student should already carried out extensive literature reviews and fully understand the main objectives and the scope of the project. The students also should acquire necessary knowledge on the background of the theories, tools, techniques and preliminary data to execute the project.

All these should be reflected and proper documented in the Project Interim Report. Thus, students are advised to follow proper/conventional formal academic report organisation as outlined in Table 2 below.

However, since students have not yet carried out the full project, but their interim report should at least addressed the sections that mentioned in the Chapter 1 and Chapter 2 of the Final Report in Project 2. A Project Interim Report should addresses and reports on the following items in Table 2, below.

Table 2: Essential Components for the IT Project Phase 1 Interim Report and the Arrangement

No.	Arrangement of the	Content
1	Project title	Refer to Appendix 5: 02 BIT-ITP-008-Report Cover Page.docx Note the format (font type, size, capitalization and the sentences arrangement) must be strictly adhere to. No changes are allowed.
2	Introduction	<ul style="list-style-type: none"> • Background • Problem statement • Objectives & Scope • Benefits & Significance • Constraint & Limitation
3	Analysis Requirement	<ul style="list-style-type: none"> • Chap 2 - Literature Review • Chap 3 - Research Methodology <ul style="list-style-type: none"> ○ Methodology ○ Planning (Gantt Chart) ○ Hardware Requirement ○ Software Requirement (Functional & Non-Functional Requirement)
5	References	- APA style

7.4 Expected Deliverables of the Project

At the end of the course, the students are expected to:

- i. Design a system / application using systematic approach.
- ii. Develop the system or application according to the title and objectives.
- iii. Use all that has been learned earlier to develop the system.

7.5 Getting Ready for Oral Presentation in Phase 1

This exercise is intended to assess the students' ability to deliver a technical presentation as a result of their project investigation. The Oral Presentation is attended and assessed by the Supervisor and Moderator.

The presentation should describe the aim of the project, an outline of the presentation, the results obtained and the extent to which the goals of the project are met. The time allocated for the presentation session is 15 to 20 minutes and an additional 10 minutes for the 'Question and Answer' session.

7.6 The Assessment of IT Project Phase 1

The assessment of IT Project Phase 1 will be divided into three main efforts. Refer to the **Table 3** below.

Table 3: Assessment Distribution for Phase 1

No.	Description of Assessment	Marks (%)
1.	Proposal	10%
2.	Documentation (Interim Report)	50%
3.	Prototype	20%
4.	Presentation	10%
5.	Progress Report	10%
	Total	100%

7.7 The Submission of Interim Report (Phase 1)

Submission of the Interim Report (Phase 1) is compulsory to all of the students taking this phase. Interim Report should be submitted in hardcopy and softcopy set. Please read the following Item 7.7.1 and Item 7.7.2.

7.7.1 Hardcopy Set

The Interim Report submission of hardcopy version should consist of Cover Page, Table of Content, the content (Chapter 1, 2, 3, etc) and the Reference List page. Cover Page Template is available (**Appendix 5: 02 BIT-ITP-008-Report Cover Page.docx**).

The Reference List page should use the APA style. Student may refer to Report Guidelines for References (**Appendix 7: 10 BIT-ITP-016-Report Guidelines (References).docx**). Student can also choose the APA Style in the References Tab available in the application for Microsoft Windows 2007 version or newer.

Two copies of the hardcopy set are needed and should be submitted to the Supervisor before or on the Due Date specified in each semester.

7.7.2 Softcopy Set

Other than hardcopy submission, softcopy version also needed for Committee record. In this case, please burn the similar set of your Interim Report to the CD in a .pdf file.

Name the .pdf file as:

Student'sName (Student'sIDNumber).pdf
--

Please also include any other resources file or appendices (if available) in the CD. End of the day, only one .pdf file is available in the CD. No other separate file should be included.

Two copies of CDs should be submitted together with the Interim Report to the Supervisor.

7.8 Project Final Report

Project Final Report is a complete set of student's project, which still need to be submitted to the Supervisor and Moderator for final checking before Hard Bound Report is prepared. This is to ensure students' Report will be as flawless as possible and any plagiarism is eliminated.

Marks for IT Project Phase 2 will be given based on this Project Final Report, not the Hard Bound Report.

7.9 Expected Skills Demonstrate by End of Phase 2

In order to award students with a Bachelor of Information Technology (Hons), the student is expected to fulfil the following criteria, so that, they are well prepared for the working industry. The skills should be demonstrated by Phase 2 students are:

- i. Communication skills (comprising computer usage, group discussion, presentation)
- ii. Practical skills (laboratory work, system design, development, testing and maintenance)
- iii. Team-work (practical work, discussion, and problem solving)

With these abilities, students will be able to undertake any role or responsibilities in the industry.

7.10 Getting Ready for Final Presentation

Student should get prepared for the Final Presentation, which comprise of both theoretical part of the project research and the practical part of system development. Student should be able to demonstrate understanding of inside and outside of the project developed.

Professionalism and ethics is very important when presenting a project proposal, in this case, students should aware of presentation tips which might help students in conducting a fruitful and sophisticated presentation. These include:

- The preparedness of a candidate during the presentation.
- The presentation skill or performance.
- The content of the project presentation.
- The communication or negotiation skill during the Question and Answer session.
- The understanding of system developed.
- The coding or programming skill applied to the developed system.
- The complexity of the system developed.

7.11 The Assessment of IT Project Phase 2

The assessment of IT Project Phase 2 will be divided into four main efforts. Refer to the **Table 4** below.

Table 4: Assessment Distribution for Phase 2

No.	Description of Assessment	Marks (%)
1.	Technical Achievement	40%
2.	Documentation (Project Report)	40%
3.	Presentation	10%
4.	Progress Report	10%
	Total	100%

7.12 The Submission of Phase 2

Submission of Project Final Report (Phase 2), should be submitted in two main forms; the hardcopy set and softcopy set. Please refer to the following section (Item 7.12.3 and Item 7.12.4). Submission of Final Report and Hard Bound Report should be in English language only.

7.12.3 Hardcopy Set

A candidate is required to submit two bound hardcopies to the Supervisor for final checking before return back to student to be improved. The improved version later need to be sent out for printing as Hard Bound Report.

For hardcopy set of Final Report must adhere to the APA style. The content of Final Report expected to be prepared and ready for Hard Bound Report. In that case, all of the content should follow the Templates given. These include:

a) Cover Page

Cover page for Final Report (Phase 2) is different compare to the Cover of Hard Bound Report. Cover Page for Final Report is similar to the Interim Report Cover Page. Refer to the **Appendix 5: 02 BIT-ITP-008-Report Cover Page.docx**.

While for the Hard Bound Report, the cover page should follow **Appendix 8: 01 BIT-ITP-007-Report Guidelines (Hard Cover and Bind Format).docx**, which is complete with the spine label.

b) Paper and Margin

The paper used for these reports should be an A4 size, (8.27" x 11.69" or 21.0 cm x 29.7 cm) and weight 80 g/m². The printing should be single sided.

The left margin must be 1.5 inch (40 mm) while all the other side (right, top and bottom) margins must be 1 inch wide (25 mm) except for the first page of each chapter and other major sections where the top margin must be at least 2 inches (50 mm).

c) Spacing and Paragraph Alignment

Text should be typed 1.5-spaced, on both sides of the paper. All information excluding page numbers must be within the text area. All typing, print, illustrations, etc. should be on both sides of the paper. Single-sided printing is not allowed.

The Final Report or Hard Bound Report must be fully justified (i.e., have even left- and right-hand margins).

d) Font Type and Size

Font type to be used is 12 points of Times New Roman. The same font type should be used throughout the report including the title page, approval page, acknowledgements, bibliography and appendices.

e) Chapters, Sections and Sub Sections

To provide coherent presentations, the report must be divided into separate chapters that contain major topic to be discussed. Each chapter must begin on a new page. The chapter title must be placed at two inches from the top centre of the new page and capitalised. If the title requires more than one line, the lines must be double-spaced and centred with inverted pyramid justification.

Each chapter is usually segmented further into separate sections and subsections as necessary. Each section must be numbered accordingly (e.g. 2.1., 2.1.1, etc). Each of these sections must begin with section headings. Each chapter begins with a Chapter Overview and ends with a Chapter Summary. This will ease the reading of the project report.

Example:

- | | |
|------------|---|
| 1.0 | Chapter overview – introduce the content of the chapter. |
| 1.n | Chapter summary – summarize the content of the chapter. |

In e numbered with 1.1 is the first level, 1.1.1 is the second level, and 1.1.1.1 is the third level. The use of subsequent level subsections (e.g. 1.1.1.1.1, etc.) is not allowed.

Each of these sections and subsections must begin with section headings as described below.

i. First-level Heading

The first level heading should be formatted as follows. Typeface is 12 point Times New Roman, boldface, left-aligned with no left indentation. One-and-a-half line spacing, 36- point and 6-point top and bottom spacing, respectively.

ii. Second-level Heading

The second level heading should be formatted as follows. Typeface is 12 point Times New Roman, boldface, left-aligned with no left indentation. One-and-a-half line spacing, 36-point and 6-point top and bottom spacing, respectively.

iii. Third-level Heading

The third level heading should be formatted as follows. Typeface is 12 point Times New Roman, italic, left-aligned with no left indentation. One-and-a-half line spacing, 36-point and 6-point top and bottom spacing, respectively.

f) Content of Final Report or Hard Bound Report

The content of a Final Report or Hard Bound Report should consist of three main parts. They are Preliminary Page, the Body Text and the References Page.

i. Preliminary Page

In Preliminary Pages, contains the following order of items:

- a. Status of Project
- b. Approval Page
- c. Title Page
- d. Declaration
- e. Dedication (optional)
- f. Acknowledgements (optional)
- g. Abstract
- h. Copyright Page
- i. Table of Contents
- j. List of Tables (if any)

- k. List of Figures (if any)
- l. List of Plates (if any)
- m. List of Symbols, Abbreviations, Nomenclature (if any)

g) Approval Page

Approval page must contain the exact title that will appear in the Title Page as well the endorsement of the supervisor verifying that all corrections have been made and that the project is ready for submission. Please refer to **Appendix 9: 03 BIT-ITP-009-Report Guidelines (Project Approval Page).docx**, for sample of the approval page.

h) Title Page

The form and contents of the title page must follow the format of the example given in **Appendix 10: 04 BIT-ITP-010-Report Guidelines (Project Title Page).docx**. Title should be capitalized and double-spaced. The title of the project as it appears on the title page must be identical to the title found on the Approval Page including the capitalisation and punctuation.

The name of the author must be the author's legal name as it appears in the Quest International University Perak records. The full name of the degree and programme must be written out. The month and year cited on the title page are the month and year of project submission.

i) Declaration

The declaration form must contain the author's declaration on the originality of the project and must be duly signed by the author. Please refer to the format in **Appendix 11: 05 BIT-ITP-011-Report Guidelines (Declaration Form).docx**. Its page is numbered with a consecutive lower-case Roman numeral.

j) Dedication (if any)

This section is optional. Similar format is to be used for this Dedication and Acknowledgement sections. The Dedication page is counted as page "iv". Its page is numbered with a consecutive lower-case Roman numeral. Refer **Appendix 12: 06 BIT-ITP-012-Report Guidelines (Abstract Acknowledgement Dedication).docx**.

k) Acknowledgement (if any)

This is a brief acknowledgement of assistance given to the author in researching and writing the project report. The Dedication page is counted as page "v". Its page is numbered with a consecutive lower-case Roman numeral. Refer **Appendix 12: 05 BIT-ITP-007-Report Guidelines (Abstract Acknowledgement Dedication)**.

l) Abstract

This is a summary of the project report, which will state the problem, the motivation for the work, the methods of investigation, results and the general conclusion. A sentence at the end with the major conclusion is useful. Since abstract is normally used in an abstracting service or search database, it should be informative and complete on its own to be of use to others seeking material within the area of interest.

An abstract should only be one-page long. Line spacing is one and half spacing and double-spacing between paragraphs. Typeface to be used is Times New Roman and the font size is 12. Hyphenated words or words separated by a slash are considered as two words.

The Abstract page is counted as page “vi”. Its page is numbered with a consecutive lower-case Roman numeral. Refer **Appendix 12: 06 BIT-ITP-012-Report Guidelines (Abstract Acknowledgement Dedication).docx**.

m) Preface

This is a brief explanatory statement of why the author came to study the subject of the report. Typeface to be used is Times New Roman and the font size is 12.

n) Table of Content

This table must include the entries for preliminary pages (copyright, abstract, dedication, and acknowledgement, lists of tables and figures, and preface), text (main divisions and subdivisions of the report), appendices, notes, references and index. Typeface to be used is Times New Roman and the font size is 12. (The format is given in **Appendix 13: 08 BIT-ITP-014-Report Guidelines (Table of Contents Template P1).docx** for Phase 1 whereas **Appendix 14: 08 BIT-ITP-014-Report Guidelines (Table of Contents Template P2).docx** for Phase 2).

The title TABLE OF CONTENTS must be placed at 1.5 inches from the top centre of the new page and capitalised.

As for copyright page, refer to **Appendix 15: 07 BIT-ITP-013-Report Guidelines (Copyright).docx**.

o) List of Table

This list provides the list of table numbers, full title and page numbers. Tables must be numbered consecutively in order of appearance in Arabic numerals (Table 1.1, 1.2, 1.3 or 2.1, 2.2, 2.3, etc).

The title of the table must appear on the top section of the table and centred. A table is not to appear in more than one page. For the table that requires more than one page, it must be sectioned properly with separate headers and titles. Typeface to be used is Times New Roman and the font size is 12.

You can see the examples in this Guideline Book on how to create and display the table. Such as, Table 1, Table 2, Table 3 and etc. Refer **Appendix 16: 09 BIT-ITP-015-Report Guidelines (List of Table and Figure).docx**.

p) List of Figure

Figures, i.e. graphs, photographs and other illustrative material are to be listed on a separate page. Number, title and page are to be given. Figures must be numbered in Arabic numerals consecutively (Fig. 1.1, 1.2, 1.3 or 2.1, 2.2, 2.3, etc) in order of appearance and captioned.

The title of the figure must appear at the bottom section of the graphics and centred. The entire figures must appear within the margin of a page. Illustrations that require space larger than allowed by the margin must adhere to the guideline on the oversized material. Typeface to be used is Times New Roman and the font size is 12.

You can see the examples in this Guideline Book on how to create and display the figures. Such as, Fig. 1, Fig. 2, and etc. Refer **Appendix 16: 09 BIT-ITP-015-Report Guidelines (List of Table and Figure).docx**.

q) List of Symbols, Abbreviations, Nomenclature

This list provides the list of symbols, abbreviations, and nomenclature used in the report. The list must be sorted alphabetically. Typeface to be used is Times New Roman and the font size is 12. The title LIST OF ABBREVIATIONS must be placed at 1.5 inches from the top centre of the new page and capitalised. Refer **Appendix 16: 09 BIT-ITP-015-Report Guidelines (List of Table and Figure).docx**.

r) Appendices

The pages should be numbered continuously with the rest of the text. Numbering Appendices page A1, B1, etc. is not acceptable. Typeface to be used is Times New Roman with the font size of 12 and 1.5 line spacing.

Each appendix must be referred to in the body of the text. Materials that are not referred to cannot be included in the appendix. Any list of publications resulted from the research may be included in the Appendix.

s) Reference List

Every reference quoted or cited in the report must be included in the list of references and numbered accordingly. References should be ordered alphabetically. Typeface to be used is Times New Roman with the font size of 12 and 1.5 line spacing.

There must be a single, unified list of references in the report. It is not permissible to put individual listings at the end of each chapter in lieu of full references. Refer to APA style referencing guideline.

t) Footnotes

The footnotes may be numbered consecutively throughout the report, or throughout each chapter. Footnotes may be placed at the foot of the page (footnotes proper), in a group at the end of a chapter (called “Notes”), or grouped at the end of the report before the bibliography (called “Endnotes”).

If notes or endnotes are collected at one place in the report, their location must be shown in the table of contents by title and page. Typeface to be used is Times New Roman and the font size is 8. Single spacing with a double spacing between entries.

7.3.4.2 Softcopy Set

A candidate is required to submit 2 CDs of softcopy report in .pdf format to the Supervisor. One copy of the report will be placed in the School level, and the other one will be placed in the university’s library.

Name (save) the CD with:

Student’s Name (Student’s IDNumber).pdf
--

There should be three main items in each CD. They are:

- i. Full version of Final Report.pdf
- ii. Executable System (.exe) with its related components or resources
- iii. User Guide.pdf (How to use the system, in step-by-step manner)

Final submission of Hardcopies and Softcopies version (after verified and signed by your Supervisor(s) **MUST** be accompanied with Project Submission Form (Refer **Appendix 17: BIT-ITP-006-Project Submission Form.docx**).

8.0 Marking and Grading

IT Project of either Phase 1 or Phase 2 will refer to the Table 5 below for students’ project grading scheme. This is to ensure that, IT Project is using the same standard of marks and grades with other subject taken throughout the degree.

Table 5: Grading Scheme for IT Project Phase 1 and Phase 2

Marks	Grade	Grade Points	Meaning
80 – 100	A+	4.00	Excellent
76 – 79	A	3.75	Excellent
72 – 75	A-	3.50	Excellent
68 – 71	B+	3.25	Credit
64 – 67	B	3.00	Credit
60 – 63	B-	2.75	Credit
56 – 59	C+	2.50	Pass
53 – 55	C	2.25	Pass
50 – 52	C-	2.00	Pass
45 – 49	D+	1.50	Conditional Pass
40 – 44	D	1.00	Conditional Pass
0 – 39	F	0.00	Fail

Starting July 2017 intake new cohorts, the grading scheme will be as follows:

Marks	Grade	Grade Points	Meaning
90 – 100	A+	4.00	Distinction
80 – 89	A	3.84	Excellent
75– 79	A-	3.67	Very Good
70 – 74	B+	3.33	Good
65 – 67	B	3.00	Credit
60 – 63	B-	2.67	Credit
55 – 59	C+	2.33	Pass
50 – 55	C	2.00	Pass
45 – 52	C-	1.50	Fail
40 – 49	D	1.00	Fail
0 – 39	F	0.00	Fail

9.0 Conclusion

With this Report Guidelines, the execution of both IT Project Phase 1 and Phase 2 will have a smooth execution and up to the standard of universities around the world. This handbook is prepared purposely to help and ease students in their project management before they complete their bachelor degree. With completion of IT Project may help prepare students for working industry.

Appendix 1:
BIT-ITP-001-Title Registration Form.docx



FACULTY OF INTEGRATIVE SCIENCE AND TECHNOLOGY
 School of Computing
 Bachelor of Information Technology (Hons)
BIT 3107/BIT 3108 IT PROJECT PHASE 1 & 2
TITLE REGISTRATION FORM

PART A

Student Name			
Student ID			
Contact No.		Email Address:	

Signature of Student: _____

Date: _____

PART B

Supervisor Name			
Contact No.		Email Address:	

Signature of Supervisor: _____

Date: _____

PART C

Proposed Project Title:

PART D

Approved by:

Signature: _____

Date: _____

Name:

Appendix 2:

BIT-ITP-002-Application for Change of Supervisor.docx

APPLICATION FOR CHANGE OF SUPERVISOR

Student's Name	
Student's ID	
Name of Current Supervisor	
Name of Proposed New Supervisor	
Reason(s) for proposed changes: <i>(Please use separate sheet, if necessary)</i>	
<div style="display: flex; justify-content: space-between; margin-top: 20px;"> <div style="width: 45%; text-align: center;"> <hr/> <i>Student's Signature</i> </div> <div style="width: 45%; text-align: center;"> <hr/> <i>Date</i> </div> </div>	

Current Supervisor's Name		Signature	
Current Project Title			
New Supervisor's Name		Signature	
New Project Title			

PART C

To be completed by Coordinator of ITP Committee.

☐

Approved

☐

Not Approved

Comments *(if any)*:

Name

Signature

Date

Appendix 3:

BIT-ITP-003-Application for Change of Project Title.docx

PART A

Student's Name	
Student's ID	
Approved Original Project Title	
Proposed New Project Title	
Reason(s) for proposed changes: (<i>Please use separate sheet, if necessary</i>) 	

_____ Student's Signature	_____ Date

To be completed by Supervisor

11

Comments (if any):

Name

Signature

Date

Date

PART C

To be completed by Coordinator of MP Committee.

☐

Approved

☐

Not Approved

Comments *(if any)*:

Name

Signature

Date

Appendix 4:

BIT-ITP-004-Application for Extension of Project.docx

To be completed by Student and forwarded to Supervisors. Then, submit to the ITP Committees within the first 3 weeks of current semester.

Student's Name			
Student's ID			
Project Title			
Semester of ITP (Phase I)		Grade Obtained	
Reason(s) for extension: <i>(Please use separate sheet, if necessary)</i>			
<hr/> <hr/> <hr/>			
<hr/> <i>Student's Signature</i>		<hr/> <i>Date</i>	

To be completed by Supervisor

Application is:

☐ Supported ☐ Not Supported

Comments (*if any*):

Name *Signature* *Date*

PART C

To be completed by Coordinator of ITP Committee.

☐

Approved

☐

Not Approved

Comments (*if any*):

Name

Signature

Date

Appendix 5:
02 BIT-ITP-008-Report Cover Page.docx



**QUEST INTERNATIONAL UNIVERSITY
PERAK**



**FACULTY OF INTEGRATIVE SCIENCES AND
TECHNOLOGY**

Bachelor of Information Technology (Hons)

**BIT3107 IT PROJECT PHASE 1 /
BIT3108 IT PROJECT PHASE 2**

**PROJECT INTERIM REPORT /
PROJECT FINAL REPORT**

PREPARED BY:

STUDENT'S NAME (STUDENT'S ID NO.)

SUBMISSION DATE:

XX SEPTEMBER 2017

Appendix 6:

BIT-ITP-005-Progress Report (p1).docx

BIT-ITP-004-Progress Report (p2).docx

**BIT3107 IT PROJECT PHASE 1
PROGRESS REPORT**

BIT-ITP-005

Name of Student :

Matrix No :

Project Title :

Supervisor :

Co-Supervisor :

Date:

Current Progress

Remarks

Future Work

Student

Supervisor

Date:

**BIT3108 IT PROJECT PHASE 2
PROGRESS REPORT**

BIT-ITP-005

Name of Student :

Matrix No :

Project Title :

Supervisor :

Co-Supervisor :

Date:

Current Progress

Remarks

Future Work

Student

Supervisor

Date:

Appendix 7:

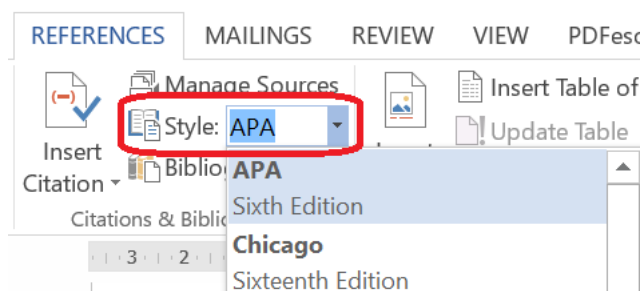
10 BIT-ITP-016-Report Guidelines (References).docx

REFERENCES

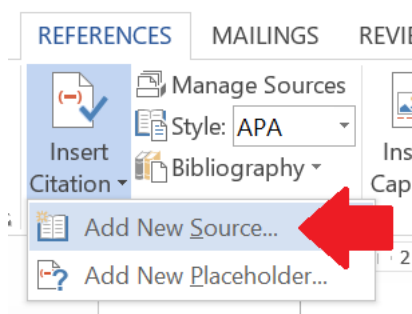
The Reference List page should use the APA style. Please browse through the Internet for APA Style referencing for your guideline. For more information, if you are using the Microsoft Windows 2007 version or newer, you can choose the APA Style in the References Tab available in the application.

HOW TO CREATE A REFERENCE LIST USING MS WORD

1. Go to **References** tab > Style: **APA**



2. Choose **Insert Citation** > **Add New Source**



3. Fill up the form:

A screenshot of the 'Create Source' dialog box in Microsoft Word. The 'Type of Source' is set to 'Book'. The 'Language' is set to 'Default'. The 'Bibliography Fields for APA' section contains the following information: Author: Frederick, Howard H.; Kuratko, Donald F.; Title: Entrepreneurship: Theory, Process, Practice; Year: 2010; City: Sydney; Publisher: Cengage Learning Australia Pty Limited. There is an 'Edit' button next to the Author field. At the bottom, there is a checkbox for 'Show All Bibliography Fields', a 'Tag name' field with 'Fre10', and 'OK' and 'Cancel' buttons.

Note: Use "Edit" button to add Author.

4. Use type 1 to insert your citation in your thesis content. Use type 2 to insert the citation in your References page.

Type 1: (Frederick & Kuratko, 2010)

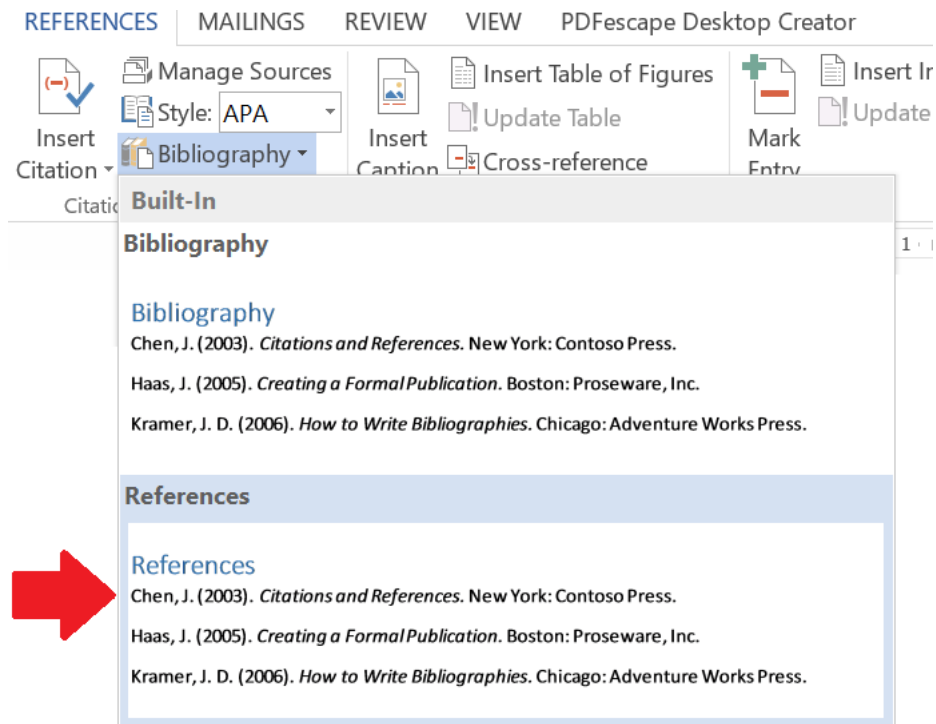
Type 2:

References

Frederick, H. H., & Kuratko, D. F. (2010). *Entrepreneurship: Theory, Process, Practice*. Sydney: Cengage Learning Australia Pty Limited.

How to use Type 2:

1. Go to **References** tab > **Bibliography**:



Appendix 8:
01 BIT-ITP-007-Report Guidelines (Hard Cover and Bind
Format).docx

50 mm from the top
of the page

40 mm from the left margin

**PROJECT TITLE: UP TO FOUR LINES, IN
ALL CAPS, INVERTED PYRAMID FORMAT**

40 mm from the right margin

Title of Project
Typeface: Times New Roman
Font size: 18

Name of Candidate
Typeface: Times New Roman
Font size: 18

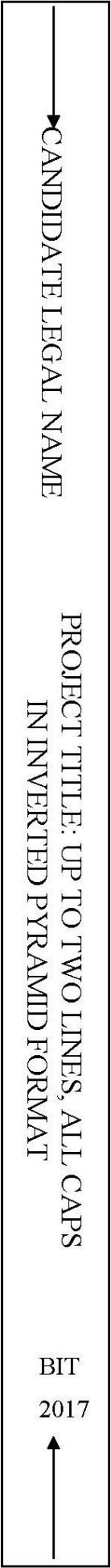
CANDIDATE LEGAL NAME

**BACHELOR OF INFORMATION
TECHNOLOGY (HONS)
FACULTY OF INTEGRATIVE SCIENCES AND
TECHNOLOGY
QUEST INTERNATIONAL UNIVERSITY
PERAK**

MAY 2017

50 mm from the
bottom of the page

Degree awarded, Name of
Faculty, Name of University
and Month & Year of project
submission
Typeface: Times New Roman
Font size: 18



CANDIDATE LEGAL NAME

PROJECT TITLE: UP TO TWO LINES, ALL CAPS
IN INVERTED PYRAMID FORMAT

BIT
2017

20 mm from the top of the spine

Name of Candidate and Title of Thesis
Typeface: Times New Roman
Font size: 14

If space on spine is not sufficient, the title can be summarized (with supervisor's approval) to fit within the available space.

Degree awarded & Year of Project submission
Typeface: Times New Roman
Font size: 14

20 mm from the bottom of the

SPINE LABEL

Appendix 9:

03 BIT-ITP-009-Report Guidelines (Project Approval Page).docx

(This page must have a 2 inch top margin.)

QUEST INTERNATIONAL UNIVERSITY PERAK

PROJECT TITLE: UP TO FOUR LINES, IN ALL CAPS, INVERTED PYRAMID FORMAT

by

CANDIDATE LEGAL NAME

The undersigned certify that they have read, and recommend to the Diploma Studies Programme for acceptance this project for the fulfilment of the requirements for the diploma stated.

Signature: _____

Main Supervisor: _____

Signature: _____

Co-Supervisor: _____

Signature: _____

Head of Department: _____

Date: _____

Appendix 10:

04 BIT-ITP-010-Report Guidelines (Project Title Page).docx

(This page must have a 2 inch top margin.)

**PROJECT TITLE: UP TO FOUR LINES, IN ALL CAPS, BOLD, INVERTED
PYRAMID FORMAT**

by

CANDIDATE LEGAL NAME

A Project

Submitted to the School of Computing

as a Requirement for the Bachelor of

INFORMATION TECHNOLOGY (HONS)

QUEST INTERNATIONAL UNIVERSITY PERAK

IPOH,

PERAK

JANUARY 2017

Appendix 11:

05 BIT-ITP-011-Report Guidelines (Declaration Form).docx

(This page must have a 2 inch top margin.)

DECLARATION OF PROJECT

Title of project

I _____
(CAPITAL LETTERS)

hereby declare that the project is based on my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any other diploma at QIUP or other institutions.

Witnessed by

Signature of Author
Name

Signature of Supervisor

Permanent address:

Name of Supervisor

Date : _____

Date : _____

Appendix 12:
06 BIT-ITP-012-Report Guidelines (Abstract Acknowledgement
Dedication).docx

(This page must have a 2 inch top margin.)

ACKNOWLEDGEMENTS / ABSTRACT / DEDICATION

Acknowledgement normally contains text to list and describe the assistance provided by various parties in preparing the project and the work undertaken. Dedication normally describes the person(s) to whom the author dedicates the work and writing.

Please continue to use 12-point font size, regular font style and Times New Roman font and no Effects boxes are checked. Under Format, this section's Paragraph settings are alignment set to justified, outline level set to Body Text, indentation set to 0" for both left and right, Spacing set to 12 pt for before and 0 point after, and line spacing set to 1.5.

Appendix 13:
08 BIT-ITP-014-Report Guidelines (Table of Contents Template
P1).docx

(This page must have a 1.5 inch top margin.)

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ACKNOWLEDGEMENT	iv
ABSTRACT.....	v
PRELIMINARY PAGE	
List of Abbreviations	1
List of Tables	2
List of Figures	3
Chapter	
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1.1 Background	4
1.2 Problem Statement	7
1.3 Objectives & Scope.....	8
1.4 Benefits & Significance	12
1.5 Constraint & Limitation	14
2. LITERATURE REVIEW	16
3. RESEARCH METHODOLOGY	26
3.1 Methodology	26
3.2 Planning	30
3.3 Hardware Requirement	33
3.4 Software Requirement.....	36
3.4.1 Functional Requirement	36
3.4.2 Non-Functional Requirement.....	38
4. CONCLUSION	40
4.1 Findings and Limitations	40
4.2 Summary	42
4.3 Future Enhancements	42
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Appendix 14:
08 BIT-ITP-014-Report Guidelines (Table of Contents Template
P2).docx

TABLE OF CONTENTS

ACKNOWLEDGEMENT	iv
ABSTRACT.....	v
PRELIMINARY PAGE	
List of Abbreviations	1
List of Tables	2
List of Figures	3
Chapter	
1. INTRODUCTION	4
1.1 Background	4
1.2 Problem Statement	7
1.3 Objectives & Scope.....	8
1.4 Benefits & Significance	12
1.5 Constraint & Limitation	14
2. LITERATURE REVIEW	16
3. RESEARCH METHODOLOGY	26
3.1 Methodology	26
3.2 Planning	30
3.3 Hardware Requirement	33
3.4 Software Requirement.....	36
3.4.1 Functional Requirement.....	36
3.4.2 Non-Functional Requirement.....	38
3.5 Software Design	40
3.5.1 Framework... ..	40
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4.2 Contribution	57
4.2 Summary	58
4.3 Future Enhancements	59
REFERENCES	60
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APPENDICES	62

Appendix 15:

07 BIT-ITP-013-Report Guidelines (Copyright).docx

Copyright © 2017 Name

Appendix 16:

09 BIT-ITP-015-Report Guidelines (List of Table and Figure).docx

(This page must have a 1.5 inch top margin.)

LIST OF TABLES

Table 1.1: Caption of Table 1.1	17
Table 1.2: Typically, Table 1.x refers to tables in Chapter 1	19
Table 1.3: This is a long caption of Table 1.3. Whenever you have a long caption, the second line is indented as shown here	20
Table 1.4: This is a longer caption of Table 1.4. Whenever you have a very long caption that spans more than one, two or even three lines, the second and subsequent lines are indented as shown here	22
Table 1.5: Caption of Table 1.5	23
Table 2.1: Typically Table 2.x refers to tables in Chapter 2	32
Table 2.2: Add some space between sets of tables from different chapters. This makes it easy for the readers	33
Table 2.3: This is a long caption of Table 2.3. Whenever you have a long description, the second line is indented as shown here	34
Table 2.4: Caption of Table 2.4	35
Table 2.5: Caption of Table 2.5	38

(This page must have a 1.5 inch top margin.)

LIST OF FIGURES

Figure 1.1: Caption of Table 1.1	10
Figure 1.2: Typically, Figure 1.x refers to tables in Chapter 1	12
Figure 1.3: This is a long caption of Figure 1.3. Whenever you have a long caption, the second line is indented as shown here	15
Figure 1.4: This is a longer caption of Figure 1.4. Whenever you have a very long caption that spans more than one, two or even three lines, the second and subsequent lines are indented as shown here.....	18
Figure 1.5: Caption of Table 1.5	20
Figure 2.1: Typically Figure 2.x refers to figures in Chapter 2	25
Figure 2.2: Add some space between sets of figures from different chapters. This makes it easy for the readers	26
Figure 2.3: This is a long caption of Figure 2.3. Whenever you have a long description, the second line is indented as shown here	28
Figure 2.4: Caption of Figure 2.4.....	29
Figure 2.5: Caption of Figure 2.5.....	30

(This page must have a 1.5 inch top margin.)

LIST OF ABBREVIATIONS

CISC	Complex Instruction Set Architecture
CPU	Central Processing Unit
CSA	Computer Systems Architecture
EPROM	Erasable Programmable Read-only Memory
OPCODE	Operation Code
PC	Program Counter
PCB	Printed Circuit Board
RAM	Random Access Memory
RIST	Reduced Instruction Set Architecture
TTL	Transistor-Transistor Logic

Appendix 17:
BIT-ITP-006-Project Submission Form.docx



FACULTY OF INTEGRATIVE SCIENCES AND TECHNOLOGY
 School of Computing
 Bachelor of Information Technology (Hons)
BIT 3108 IT PROJECT PHASE 2
PROJECT SUBMISSION FORM

PART A

By signing this form, student's project and its content is transferred to the University. The project and its content will be placed in the Quest International University Perak Open Access repository. Students need to provide **ONE (1)** hardbound copies, **TWO (2)** electronic copies of the report in PDF format as well as **TWO (2)** electronic copies of the software or programme in executable format to the Faculty.

Tick (✓) whichever applicable.

- () I AGREE to allow Open Access (public view) to our project.*
- () I wish to RESTRICT access to the public availability of both the library paper bound copy and the electronic copy for up to _____ years of my project* due to the following reasons:

*If none of the options are selected, the first option will be carried out by default.

I hereby certify that, I have obtained and attached hereto a written permission statement from the owner(s) of each third-party copyrighted matter to be included in my selected project, and will allow inclusion in the Open Access repository. I certify that the version I am submitting is the same as that approved by the Faculty.

I hereby grant Quest International University Perak and its agents the non-exclusive license to archive and make accessible to my project in whole or in part in all forms of media, now or hereafter known. I retain all other ownership rights to the copyright of the project. I also retain the right to use in future works (such as articles or books) all or part of this project.

Candidate's Signature : _____

Name of Candidate : _____

Date : _____

PART B

Verification by Supervisor and Moderator of work completion, where, any correction has been made accordingly.

Supervisor's Signature : _____

Name of Supervisor : _____

Date : _____

Panel's Signature : _____

Name of Moderator : _____

Date : _____